Pine Horse Valley Roadside Hazard Tree Removal Project
(Ranch Fire – Northwest zone)

Botanical Biological Assessment, Biological Evaluation, and Invasive Plant Risk Assessment

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# Introduction

The Ranch Fire burned approximately 280,000 acres of the Mendocino National Forest in July to September 2018. The purpose of this project is to remove current and former fire-caused hazard trees where they exist along roadsides in the Upper Lake Ranger District. The prescriptions will include both commercial and noncommercial activities, using a range of equipment. Hazard trees within one and a half tree heights of roads will be removed, up to a maximum of 200 feet on either side of the road.

# NEPA Compliance

This project is Categorically Excluded from further documentation (a project file and Decision Memo) based on 36 CFR 220.6(d)(4): Repair and maintenance of roads, trails, and landline boundaries. Use of this Categorical Exclusion requires no extraordinary circumstances for a list of resource conditions, including no adverse effects on Endangered, Threatened, Proposed, or Sensitive plant species.

## Biological Assessment

According to the US Fish and Wildlife Service, possible listed plant species in the project area include the Threatened *Howellia aquatilis* (water howellia) and Endangered *Sidalcea keckii* (Keck's checker-mallow).

Water howellia is a small aquatic annual that occurs in the draw-down zone of small ponds that are shaded by forest vegetation. It is currently known on the Mendocino National Forest from seven ponds in the Covelo Ranger District. There are no occurrences of water howellia nor suitable habitat within the project area. I have determined that this project will have no effect on water howellia.

Keck's checker-mallow is an annual forb, known conclusively only from the Sierra foothills of Tulare and Fresno counties. Some plants collected from Colusa County were tentatively identified as *S. keckii* in 2009, but this is under review and will be determined by genetic testing. The species has never been identified or collected from Mendocino NF lands. I have determined that this project will have no effect on Keck's checker-mallow.

## Biological Evaluation

There are 26 species on the Mendocino National Forest's Sensitive Plant Species List. Surveys are still ongoing as of this writing, but currently there are known occurrences of three Sensitive species within the project area: *Harmonia stebbinsii* (Stebbins' tarweed), *Epilobium nivium* (Snow Mountain willowherb), and *Calycadenia micrantha* (small-flowered calycadenia). Many of the activities proposed for this project have the potential to negatively affect these Sensitive plant occurrences. In order to meet the Categorical Exclusion's requirement of no adverse impacts to Sensitive species, the following activities should be avoided within Sensitive plant occurrences:

- Constructing landings
- Decking logs
- Creating burn piles, either by hand or with machines
- Heavy equipment use, including masticators

Hazard trees within these occurrences must be felled by hand. If they cannot be removed without substantial site damage, they should be left in place. These sites – and any sites that are found in the remainder of the surveys – are/will be flagged for avoidance with yellow-and-black striped flagging prior to project implementation. Maps will be included in this report when the surveys are complete.

## Invasive Species Risk Assessment

Due to the fact that the entire project area is near a road, there are abundant infestations of non-native invasive species in the project area. Surveys for these species are also ongoing, but known species include yellow star-thistle (*Centaurea solstitialis*), Klamathweed (*Hypericum perforatum*), bull thistle (*Cirsium vulgare*), medusahead (*Elymus caput-medusae*), sweet fennel (*Foeniculum vulgare*), and wooly mullein (*Verbascum thapsus*).

The equipment used to implement this project will be frequently entering roadside infestations of non-native invasive species. This equipment is likely to expand existing infestations and spread seeds to other portions of the roadsides within the project area. The existence of many weed propagules already within the project area combined with the extensive ground disturbance caused by this project indicates a **high risk** of expansion and/or spread of *existing* sites.

Equipment operators should always thoroughly clean their equipment prior to entering the project area. Properly cleaned equipment will have no visible soil, plant parts, or seeds present. Avoid staging equipment and vehicles in infested areas.

## Site Maps

Coming soon…